SUBJECT: Safety Of Use Message (SOUM) TACOM Control No. SOUM-04-003.

Operational, M142, NSN: 1005-00-854-4463, LIN: M74618, Used

with M60 Machine

Gun for Overhead Firing.

* URGENT *

* DEATH OR SERIOUS INJURY TO SOLDIERS OR *

* DAMAGE TO ARMY EQUIPMENT WILL OCCUR IF THE *

* INSTRUCTIONS IN THIS MESSAGE ARE NOT IMPLEMENTED *

1. References:

a. DTG 022130Z APR 92, SOUM, Operational, AMCCOM No. 92-08, subject:

Deadline After Validation; M142 Gun Mount, NSN 1005-00-854-4463, Used with

M60 Machine Gun for Overhead Firing.

b. DTG 212100Z APR 92, SOUM, Operational, AMCCOM No.
92-10, subject:

Deadline After Validation; M142 Gun Mount, NSN 1005-00-854-4463, Used with

 ${\tt M60}$ Machine Gun to Change Overhead Firing to Love Overhead Firing Range

(Infiltration Courses).

- c. Letter, HQ, US Army Armament, Munitions and Chemical Command, 19 Dec 86, subject: 7.62mm Machine Gun Infiltration Course Safety Criteria.
- d. Memorandum For Record, ATIC-RTI, August 1987, subject: Interim Fix to M142 Machine Gun Mount for Use on Overhead Fire Ranges (Infiltration Course).
- e. Memorandum For Record, AMSMC-SFS, 6 Feb 97, subject: Modification of M142 Gun Mount for M60 Machine Gun.
- f. TM 9-1005-245-13&P, Operator, Unit and Direct

Support Maintenance Manual for Ground Mounts; Machine Gun Mounts; and

Combinations for Tactical/Armored Vehicles, Dec 1994.

- g. TM 9-1005-224-23&P, Unit and Direct Support Maintenance Manual for M60 Machine Gun, May 1998.
- 2. Distribution: Note this is a "Safety Of Use Message". MACOM Commanders

will immediately retransmit this message to all subordinate commands/activities that utilize the M60/M142 combination for overhead fire.

This message does not concern other uses of the M60/M142. Commanders will

re-transmit this message within 24 hours of receipt of this message and

acknowledge receipt of this message within five working days to Safety

Office, Tank-automotive and Armament Command-Rock Island (TACOM-RI), ATTN:

AMSTA-CS-CZR, Rock Island, IL 61299-7630, e-mail: amsta-cs-czr@ria.army.mil.

3. Problem Discussion.

a. A fatality has recently occurred at least in part the result of

incorrect M60 Machine Gun mounting into the M142 Machine Gun Mount, NSN:

1005-00-854-4463, LIN: M74618. If the M60 is not properly seated and

secured the weapon will not be limited to firing into only safe zones during

training exercises. The most recent fatality occurred when an M60 used for

overhead fire was not seated properly to ensure that the latch secured the

weapon in a safe firing position to avoid the training participants. As a

result, a drill instructor was fatally wounded. Previously released SOUMs

92-08 and 92-10 addressed this problem, but may not have been properly

implemented. Therefore, this SOUM (04-XXX) addresses the required changes

to ensure the M60 is securely mounted in a safe configuration in the M142 Mount for overhead firing.

b. Refer to Technical Manual (TM) 9-1005-245-13&P, February 1973, page 10-1, for view of subject mount. Page C-26-1, Figure C-26 gives a breakdown of the M142 mount including Item 16, Catch Strike, NSN: 5340-01-509-6851, which will be modified in accordance with the authorized fix. For authorized fix instructions, refer to the ATIC-RTI and AMSMC-SFS memorandums cited above.

4. RISK LEVEL. The initial risk assessment code for this hazard is I-D

(Hazard Severity: Catastrophic - Hazard Probability: OCCASSIONAL)

resulting in a HIGH risk level. There is a likely probability that death

and or permanent disability injuries may result if the M142 Gun Mount fails

to hold the M60 Machine Gun during Overhead Firing. Provided all Direct

Support maintenance checks and services are applied to all M60 Machine Guns

and M142 Mounts during overhead live fire, there is a Medium Residual risk

level (Hazard Severity: Catastrophic - Hazard Probability: Improbable).

5. User Actions.

a. Commanders must respond to TACOM-RI, AMSTA-CS-CZR, e-mail:
amsta-cs-czr@ria.army.mil <mailto:amsta-csczr@ria.army.mil>, within 10 days
and identify whether or not they possess the mount (NSN:
1005-00-854-4463,
LIN: M74618). The mount must not be used (and M60 overhead firing
prohibited) until the gun mounts have been successfully modified and

inspected.

b. Inspection Procedures. Ensure mount has been modified in accordance

with fix instructions. Ensure modification procedures have been

incorporated into range management policies, procedures, records, and range

safety check lists to ensure continuity regardless of changes in personnel

or equipment. Ensure a copy of this SOUM is placed with technical manual

(TM) 9-1005-245-13&P, February 1973, page 10-1 (view of subject mount).

Page C-26-1, Figure C-26 gives a breakdown of the M142 mount including Item

16, Catch Strike, NSN: 5340-01-509-6851, which will be modified in

accordance with the authorized fix. Modified equipment must be dedicated to

the sole purpose of overhead live fire training and never used in any other

scenario. The following Direct Support maintenance checks and services must

be applied to all M60 Machine Guns and M142 Mounts used during overhead live fire:

- (1) After each 10,000 rounds fired, the machine gun barrel must be replaced and the weapon must undergo a complete technical inspection IAW TM 9-1005-224-23&P.
- (2) After each 10,000 rounds fired, the M142 Machine Gun Mount Strike Catch is checked for cracks using a dye penetrant. If a crack is found, latch must be replaced. The Spring, NSN: 5360-00-772-0187, and Pin, NSN: 5315-00-772-0186, are automatically replaced after 10,000 rounds fired.
- (3) If round count has not been maintained on mounts which have been modified: Perform dye penetrant test, replace spring and pin as described

above and initiate round count.

- c. Correction Procedures. Modify M142 Machine Gun Mount with fix instructions provided. Note: A sketch of the instructions below is available upon request from technical POC or your local Logistics Assistance Representative (LAR).
- (1) An 11/32 inch hole is drilled through the right side of the Strike, Catch. The Catch is rather hard steel measuring 45 on the Rockwell scale. The drilled hole is located 5/8 inch from the right of center on the catch and 1/4 inch up from the bottom edge. This location allows the head of the bolt that is inserted into the hole to clear the trigger housing of the M60 Machine Gun.
- (2) A fully threaded 5/16 inch bolt, 3 1/4 inches in length is required. The bolt must be ground to a taper to allow it to clear the base of the Platform Assembly. The taper begins 5/8 inch from the end of the bolt and ends with a width of 3/16 inch at the end of the bolt.
- (3) The bolt is inserted so the tip of the taper is 1/16 inch (thickness of a quarter) from the platform assembly. The bolt is secured by applying a nut and lock washer on both sides of the catch. The bolt should be Grade 7 or above. Refer to PS Magazine issue 572 dated July 00 for information on the grading of bolts (http://www.logsa.army.mil/psmag/).

c. Parts Required.

(1) Spring, NSN: 5360-00-772-0187. Managed by S9I with a current cost of \$1.65.

- (2) Pin, NSN: 5315-00-772-0186. Managed by S9I with a current cost of \$6.59.
- (3) Bolt, 5/16 inch diameter, Grade 7 or above, (2) nuts, and (2) washers.
- d. Requisitioning Instructions: Locally purchase 5/16 inch bolt, nuts, and washers. Requisition Spring and Pin through Army supply system.
 - e. Category of Maintenance: Direct Support.
- 6. Program Sponsor Actions. Publications that require change as a result of this inspection are: TM 9-1005-245-23&P and TM 9-1005-224-23&P.
- 7. Supply Status. Estimated Cost Impact Of Stock Fund Items: This fix is for training centers only and will not adversely affect inventory of the replacement parts.
- 8. Final report from the recent fatality has not yet been released. Any required changes to equipment, overhead fire range procedures, or this SOUM as a result of findings of the investigation will be released by future TACOM SOUM.
- 9. The Points of Contact (POC).
- a. Logistics Information: William Jensen, TACOM-Rock Island, AMSTA-LC-CSIO, DSN: 793-3677, Commercial 309-782-3677, email: jensenw@ria.army.mil.
- b. Technical Information: Barbara Painter, TACOM-Rock Island, AMSTA-LC-CSIO, DSN: 793-4403; Commercial 309-782-4403, email:

painterb@ria.army.mil.

c. Safety Engineering: Judith Windham, TACOM-Rock Island, AMSTA-CS-CZR, DSN 793-6367, Commercial 309-782-6367, email: windhamj2@ria.army.mil.

10. To find your TACOM LAR, you must be a registered user in the Army

Electronic Product Support (AEPS) database; if not request access to AEPS at

the public page https (double slash)

aeps.ria.army.mil/aepspublic.cfm. Click

on enter AEPS, a security alert box will appear, click on "OK". Then a

client authentication box pops up and you can click "OK" or "Cancel". That

will bring up the enter-network password box where you will enter your user

name and password and click "OK". Once logged into the AEPS site, click on

the LAR tab, (at the top of page) in popular applications. Click on Log Asst

Personnel on the left side of the screen under common links. Then select the

appropriate region, i.e. CONUS, USAREUR, Far East, Kuwait. Select the

location nearest you and click on a name. This will give you a LAR's name,

DSN and commercial phone number, email address, and photo.

If you don't have access to AEPS, you can also obtain this information by

contacting the TACOM Senior Command Representative (SCR) for your area.

CONUS-East, (includes all units east of the Mississippi plus Fort Polk,

FORSCOM, SOUTHCOM, Kuwait, and CONUS units deployed, (to include National

Guard and Reserve units), DSN 236-6923, Commercial 910-396-6923.

CONUS-West, (includes all units west of the Mississippi except Fort Polk, to

include all National Guard and Reserve units), DSN 737-0263, Commercial

254-287-0263. USAREUR (Great Britain, Germany, Belgium, Luxemburg, Italy,

Bosnia, Kosovo, and Macedonia) DSN 314-375-3461, Commercial 01149

621-487-3461, in Germany, 0621-487-3461; Far East (includes Alaska, Hawaii,

Korea, Okinawa, Kwajlein, and Japan) DSN 315-722-036/6579, commercial 011 82

 $32\ 520\text{-}6036/6579.$ SBCT you can call your (SCR) at DSN 357-2991, Commercial

253-967-2991.

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